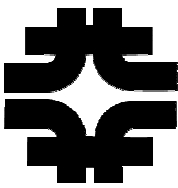# GSI Authentication For CDF

Ian Fisk

GDM Report

February 8, 2005

Project Drivers & Scope

- This really isn't a project yet it's an investigational effort
  - The basic issue is renewal of credentials
  - In the beginning the CAF sent around the entire Keytab file (encrypted), so that as jobs ran the results could be returned either directly to users or to storage they controlled
    - Job can sit in the queue for long periods of time, but at run time credentials can be created
    - Very nicely scalable system for returning results and it relies on a lot of existing infrastructure
  - More recently only the keytab file for the user who submitted the job is sent along with the job.
    - More secure
  - Very recently Matt Crawford suggested only sending the cache
    - This allows the credentials to be renewed 7 consecutive days
      - If job sits in the local queue for more than 7 days it's a problem, but it prevents needing to send the keytab file

Issues
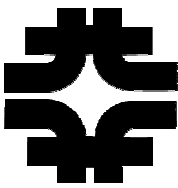
- When the Italian developers in CDF began looking at migrating some of the CAF usage onto the LCG, there was a natural tendency to look at using Grid credentials
  - LCG nodes do not have kerberos installations, so the client software would have to be sent down.   Not a show stopper
  - There was a desire to use a more commonly deployed authentication infrastructure
- SAM-Grid Sandboxes the user credentials so that they are available on the worker nodes
  - They are not currently renewed so they are submitted with lifetime of a few days
- There are technologies life myproxy that can enable this functionality.
- Currently there seems to be no compelling reason to switch the authentication method used in the dCache
  - Basically works, scales OK and re-uses a lot of FNAL infrastructure
  - Should work comfortably beside other authentication methods.
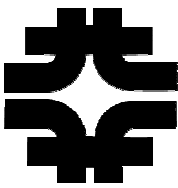
Effort

- UCSD has agreed to continue with CAF support here at FNAL in the form of a student until the summer of 2006

- Their post-doc Elliot, continues to work on CAF issues, but I believe he is expected to transition to physics

- Frank himself is moving to CMS work, but his group continues to play an important role.

- Significant INFN support for Grid and Infrastructure support.
  - Igor Sfiligoi will be here full time starting Feb 15th.
  - Additional Manpower in Italy for R&D and deployment
    - Naturally they are being encouraged to concentrate on issues relevant to LCG
    - Condor Glide-in is currently in development